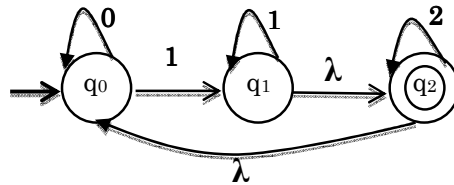


Automata and formal languages

1. For the input alphabet $\{0,1\}$, construct a λ -NFA accepts the following language: the set of all strings such that each string should start by 0 and there is no two consecutive 1's.

2. For the λ -NFA



Construct the equivalent NFA.

3. Construct three λ -NFA's equivalent to the following regular expression:

- a. $10 + (0+11) 0^*1$
- b. $01[(10)^* + 111)^* + 0]^*1$
- c. $01^*0 + 01^*10^* + 1^*0^*$